

Practice: 328 - Conservation Crop Rotation**Scenario: #1 - Standard Rotation****Scenario Description:**

In this region this practice may be part of a conservation management system to: 1) Reduce sheet and rill or wind erosion 2) Improve soil quality 3) Supply nitrogen through biological nitrogen fixation to reduce energy use 4) Manage the balance of plant nutrients 5) Conserve water 6) Manage saline seeps 7) Manage plant pests (weeds, insects, and diseases). 8) Provide food for domestic livestock 9) Provide annual crops for bioenergy feed stocks 10) Provide food and cover for wildlife, including pollinator forage, cover, and nesting. This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 200 cropland farm. No foregone income. Cost represents typical situations for conventional (non-organic) producers.

Before Situation:

The rotation consists primarily of low residue producing row crops. Fields range from nearly flat to C and D slopes. Erosion, soil quality, and pest management are the primary concerns.

After Situation:

A rotation is establish that provides additional high residue and/or perennial crops that reduce erosion, improve soil quality, and break pest cycles.

Scenario Feature Measure: Area Planted

Scenario Unit: Acre

Scenario Typical Size: 200

Scenario Cost: \$339.80

Scenario Cost/Unit: \$1.70

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$33.98	10	\$339.80

Practice: 328 - Conservation Crop Rotation**Scenario: #2 - Conversion Irrigated to Dryland****Scenario Description:**

In this region this practice may be part of a conservation management system to primarily convert from an irrigated cropping system to dryland farming. In addition to improving water use efficiency the rotation may 1) Reduce sheet and rill erosion 2) Reduce soil erosion from wind 3) Maintain or improve soil organic matter 4) Manage the balance of plant nutrients 5) Manage plant pests (weeds, insects, and diseases). 6) Provide food for domestic livestock and 7) Provide food and cover for wildlife. This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 120 ac pivot irrigated cropland farm. There is foregone income involved with this conversion from irrigated to dryland farming due to lower yields and net return. Cost represents typical situations for conventional (non-organic) producers converting from irrigated cropping to dryland farming.

Before Situation:

This rotation consisted of growing row crop grains that received a significant (more than half) of the required water via irrigation. The water demands are impacting the area's water availability. Erosion, soil condition, and future water availability are the major concerns.

After Situation:

The dryland rotation, using the same crops or a rotation that grows crops over different periods, will be part of a management system capable of utilizing available rainfall and soil moisture more efficiently and controlling wind and water erosion. Corn yields will be expected to be reduced from 170 to 70 bu/acre.

Scenario Feature Measure: Area planted

Scenario Unit: Acre

Scenario Typical Size: 120

Scenario Cost: \$47,395.80

Scenario Cost/Unit: \$394.97

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Foregone Income						
FI, Corn Irrigated	1960	Irrigated Corn is Primary Crop	Acre	\$459.52	120	\$55,142.40
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$73.05	-120	(\$8,766.00)
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$33.98	30	\$1,019.40

Practice: 328 - Conservation Crop Rotation**Scenario: #3 - Organic Rotation****Scenario Description:**

In this region this practice may be part of a conservation management system to: 1) Reduce sheet and rill erosion 2) Reduce soil erosion from wind 3) Maintain or improve soil organic matter 4) Manage the balance of plant nutrients 5) Improve water use efficiency 6) Manage plant pests (weeds, insects, and diseases). 7) Provide food for domestic livestock and 8) Provide food and cover for wildlife. This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 100 cropland farm. No foregone income. Cost represents typical situations for organic producers.

Before Situation:

The rotation consists primarily of low residue and conventionally produced row crops. Fields range from nearly flat to C and D slopes. Erosion, soil quality, and pest management are the primary concerns.

After Situation:

The rotation established transitions the rotation from a conventional system to an organic system. The rotation is planned that compliments erosion control, nutrient cycling, soil organic matter, and pest management via crop rotation.

Scenario Feature Measure: Area Planted

Scenario Unit: Acre

Scenario Typical Size: 100

Scenario Cost: \$1,359.20

Scenario Cost/Unit: \$13.59

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$33.98	40	\$1,359.20

Practice: 328 - Conservation Crop Rotation**Scenario: #4 - Specialty Crops****Scenario Description:**

Describe the key features of the scenario so that it can be readily separated from other scenarios in the same practice. Describe the resource concerns that need to be addressed by installing the practice. In this region a rotation of specialty crops (fruits and vegetable) are produced as part of a conservation management system to: 1) Reduce sheet and rill erosion 2) Reduce soil erosion from wind 3) Maintain or improve soil organic matter 4) Manage the balance of plant nutrients 5) Improve water use efficiency, and 6) Manage plant pests (weeds, insects, and diseases). This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 50 acre specialty crop farm. No foregone income. Cost represents typical situations for conventional (non-organic) producers.

Before Situation:

This rotation consisted of growing specialty crops. Fields range from nearly flat to B and C slopes. Erosion, soil quality, and pest management are the primary concerns.

After Situation:

The rotation established adds higher residue crop(s) to the rotation that reduce erosion, improve soil quality, and break pest cycles.

Scenario Feature Measure: Area Planted

Scenario Unit: Acre

Scenario Typical Size: 50

Scenario Cost: \$1,699.00

Scenario Cost/Unit: \$33.98

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$33.98	50	\$1,699.00

Practice: 328 - Conservation Crop Rotation**Scenario: #5 - Organic Specialty Crops****Scenario Description:**

In this region a rotation of specialty crops (fruits and vegetable) are produced as part of a conservation management system to: 1) Reduce sheet and rill erosion 2) Reduce soil erosion from wind 3) Maintain or improve soil organic matter 4) Manage the balance of plant nutrient 5) Improve water use efficiency, and 6) Manage plant pests (weeds, insects, and diseases). This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 25 acre specialty crop farm. No foregone income. Cost represents typical situations for organic producers. .

Before Situation:

This rotation consisted of growing specialty crops. Fields range from nearly flat to B and C slopes. Erosion, soil quality, and pest management are the primary concerns.

After Situation:

The rotation established adds higher residue crop(s) to the rotation that reduce erosion, improve soil quality, and break pest cycles.

Scenario Feature Measure: Area Planted

Scenario Unit: Acre

Scenario Typical Size: 25

Scenario Cost: \$2,718.40

Scenario Cost/Unit: \$108.74

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$33.98	80	\$2,718.40

Practice: 328 - Conservation Crop Rotation**Scenario: #6 - Small Farm <25 acres****Scenario Description:**

In this region a rotation of specialty crops (fruits and vegetable) are produced as part of a conservation management system to: 1) Reduce sheet and rill erosion 2) Reduce soil erosion from wind 3) Maintain or improve soil organic matter 4) Manage the balance of plant nutrient 5) Improve water use efficiency, and 6) Manage plant pests (weeds, insects, and diseases). This practice payment is provided to acquire the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical 5 acre or less specialty crop farm. No foregone income. Cost represents typical situations for conventional (non-organic) and organic producers on small farms less than 25 acres.

Before Situation:

This rotation consisted of growing specialty crops. Fields range from nearly flat to B and C slopes. Erosion, soil quality, and pest management are the primary concerns.

After Situation:

The rotation established adds higher residue crop(s) to the rotation that reduce erosion, improve soil quality, and break pest cycles.

Scenario Feature Measure: Area Planted

Scenario Unit: Acre

Scenario Typical Size: 5

Scenario Cost: \$1,699.00

Scenario Cost/Unit: \$339.80

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$33.98	50	\$1,699.00